

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

PCT204-10

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/000096

International filing date (day/month/year)

07.01.2005

Priority date (day/month/year)

13.01.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

TORAY INDUSTRIES, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000096

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.

PCT/JP2005/000096

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	4, 6-11, 13-15, 17-19	YES
	Claims	1-3, 5, 12, 16	NO
Inventive step (IS)	Claims		YES
	Claims	1-19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO

2. Citations and explanations:

Document 1: US 4811626 A1 (Michel Bezin) 14 March 1989

Document 2: JP 7-144371 A (Nippon Steel Chemical Co., Ltd.) 06 June 1995

Document 3: JP 2003-72666 A (Kanpanyoro Sosieta A Responsabirita Rimitata) 12 March 2003

Document 4: JP 8-295977 A (Sumitomo Light Metal Industries, Ltd.) 12 November 1996

Document 5: JP 1-205091 A (Showa Aluminum Corp.) 17 August 1989

Document 6: JP 7-1607 A (Mitsubishi Plastics, Inc.) 06 January 1995

Because the inventions of claims 1-3, 5, 12 and 16 are described in document 1 cited in the ISR (column 3, line 57 to column 4, line 2; Figs. 1-10), they do not appear to be novel or to involve an inventive step.

The invention of claim 4 does not appear to involve an inventive step based on document 1, and document 2 cited in the ISR (paragraphs 0001, 0016). Making the fiber reinforced plastic member described in document 1 the member having the elasticity modulus and fabric content rate described in document 2 can be easily conceived of by a party skilled in the art.

The inventions of claims 6-11 and 13 do not appear to involve an inventive step based on document 1 and document 3 cited in the ISR (paragraphs 0015-0020; Figs. 8-12). Adding the fiber reinforced plastic layer described in document 3 to the outer shell formed from the fiber reinforced plastic described in document 1 can be easily conceived of by a party skilled in the art.

The invention of claim 14 does not appear to involve an inventive step based on document 1, and document 4 cited in the ISR (paragraphs 0017, 0035). The inventions of documents 1 and 4 belong to the same technical field in the point that they both pertain to metal bicycle parts. Therefore, making the insert member formed from the metal described in document 1 the heat-treated aluminum alloy described in document 4 can be easily conceived of by a party skilled in the art.

The invention of claim 15 does not appear to involve an inventive step based on document 1 and document 5 cited in the ISR (page 2, lower right column). The inventions

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V.2

of documents 1 and 5 belong to the same technical field in the point that they both pertain to metal bicycle parts. Therefore, making the insert member formed from the metal described in document 1 the aluminum alloy in which the oxide film is formed described in document 5 can be easily conceived of by a party skilled in the art.

The invention of claim 17 does not appear to involve an inventive step based on document 1. Because conventionally the hardness of an adhesive can vary as long as it delivers the necessary adhesive strength, the point about making the hardness of the adhesive less than that of a matrix resin which is an adhered material in particular is merely a design variation.

The inventions of claims 18 and 19 do not appear to involve an inventive step based on document 1 and document 6 cited in the ISR (paragraphs 0006-0009; Figs. 1-4). Producing the fiber reinforced plastic members comprising the plurality of the members described in document 1 by the preforming, integrated step described in document 6 can be easily conceived of by a party skilled in the art.